Claims

1. An anti-microbial composition comprising:
   (i) a C_1 to C_4 monohydric alcohol carrier fluid, present at a level of at least 25% by weight of the total composition (excluding any volatile propellant present);
   (ii) an iron (III) chelator having an iron (III) binding constant of 10^{23} or greater;
   (iii) a solubility promoter selected from the group consisting of:
      (a) water;
      (b) an organic amine;
      (c) a polyhydric alcohol or derivative thereof;
      (d) a volatile propellant having fluorine-carbon or oxygen-carbon bonds;
      (e) any combination of (a) to (d).

2. An anti-microbial composition according to claim 1, that is a deodorant composition for use on the human body or on apparel worn in close proximity thereto.

3. An anti-microbial composition according to claim 1 or 2, that is a homogeneous solution.

4. An anti-microbial composition according to claim 3, that is a homogeneous solution in aqueous ethanol.

5. An anti-microbial composition according to any of the preceding claims, wherein the weight ratio of C_1-C_4 monohydric alcohol carrier fluid to water is greater than 65:35.

6. An anti-microbial composition according to any of the preceding claims, wherein the weight ratio of C_1-C_4 monohydric alcohol carrier fluid to water is greater than 75:25 and the solubility promoter comprises an organic amine.

7. An anti-microbial composition according to claim 6, wherein the organic amine is present at a level sufficient to neutralise at least 60% of any acid groups on the iron (III) chelator.

8. An anti-microbial composition according to claim 6 or 7, wherein the organic amine is present at a level sufficient to lead to an aqueous solution of the chelator salt having a pH of between 6 and 8 (at a molar concentration of chelator salt equal to that present in the composition).

9. An anti-microbial composition according to any of the preceding claims, wherein the iron (III) chelator has a binding coefficient for iron (III) of greater than 10^{26}.

10. An anti-microbial composition according to any of the preceding claims, wherein the iron (III) chelator is a polyaminocarboxylic acid or salt thereof.

11. An anti-microbial composition according to any of the preceding claims, wherein the iron (III) chelator has an acid form with at least five ionisable acid groups.

12. An anti-microbial composition according to claim 10, wherein the iron (III) chelator is diethylenetriaminepentaacetic acid or a salt thereof.

13. An anti-microbial composition according to any of the preceding claims, wherein the chelator is present at a concentration of 0.01% to 10% by weight of the composition, excluding any volatile propellant present.

14. An anti-microbial composition according to any of the preceding claims, comprising an additional anti-microbial agent.

15. An anti-microbial composition according to claim 14 wherein the additional anti-microbial agent is a cationic bactericide.

16. An anti-microbial composition according to any of the preceding claims, comprising fragrance material at up to 4% by weight of the composition, excluding any volatile propellant present.

17. An anti-microbial composition according to any of the preceding claims, that comprises a volatile propellant.

18. An anti-microbial composition according to claim 17, wherein the volatile propellant comprises from 30 to 99% by weight of the total composition.

19. An anti-microbial composition according to claim 18, that comprises greater than 40% by weight of volatile propellant and a solubility promoter selected from the group comprising:

(a) an organic amine free of any N-H bonds and/or O-H bonds;

(b) an organic amine and a polyhydric alcohol or derivative thereof;

(c) an organic amine and a volatile propellant having fluorine-carbon or oxygen-carbon bonds.

20. An anti-microbial composition according to any of claims 17 to 19, wherein the weight ratio of C_1-C_4 monohydric alcohol carrier fluid to water is between 95:5 and 99:1.

21. An anti-microbial composition according to any of claims 17 to 19, wherein the weight ratio of C_1-C_4 monohydric alcohol carrier fluid to water is greater than 99:1.

22. A method of controlling microbial numbers, said method comprising the application to a substrate of an anti-microbial composition according to any of the preceding claim.

23. A cosmetic method of inhibiting the generation of malodour comprising the topical application to the human body or to apparel worn in close proximity thereto of a composition according any one of claims 2 to 21.

24. A cosmetic method of delivering enhanced fragrance intensity comprising the topical application to the human body or to apparel worn in close proximity thereto of a composition according any one of claims 2 to 21 that also comprises a fragrance material.

25. A method for the manufacture of an anti-microbial composition, said method comprising the formation of a solution of an iron (III) chelator having an iron (III) binding constant of 10^{23} or greater in a C_1 to C_4 monohydric alcohol carrier fluid, present at a level of at least 25% by weight of the total composition (excluding any volatile propellant present), and also comprising a solubility promoter selected from the group consisting of:

(a) water;
(b) an organic amine;
(c) a polyhydric alcohol or derivative thereof;
(d) a volatile propellant having fluorine-carbon or oxygen-carbon bonds;
(d) any combination of (a) to (d).

26. A method for the manufacture of an anti-microbial composition according to claim 25, comprising the addition of the chelator and an organic amine to water to form an aqueous solution, followed by dilution with the C_1 to C_4 monohydric alcohol carrier fluid to form an aqueous alcohol solution, optionally followed by pressurisation with a liquified volatile propellant.

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